REJOINDER BY PROFESSOR FISHER

Dr. Knibbs's criticisms of the plan which has been proposed by myself and many others[1] for stabilizing monetary units are interesting and able, but, for the most part, traverse ground which has already been covered.[2]

His chief criticism seems to be that we can correct the aberrations of our gold standard by special clauses in contracts providing for adjustment by means of an index number and that this extraneous adjustment would obviate the need of any change in our monetary system.

To prove that an adjustment by means of an index number is feasible Dr. Knibbs cites the fact that such adjustments have been made in Australia in relation to wages. I hasten to say that, in the absence of stabilization, I am ready to go quite as far as Dr. Knibbs in favoring such wage adjustments.

Australia is not alone in adopting this principle. A noteworthy result of the recent war is the increased interest in this country also in the measurement of price levels by means of index numbers and the practical utilization of these index numbers in making equitable adjustments in the payment of wages. Strikes have occasionally been settled by wage increases proportionate to the increased cost of living. In Oregon and Washington the minimum wage was revised on the same basis. The War Labor Board and the Shipping Board have in many instances used index numbers in determining wage scales. In some cases, these boards arranged for periodic readjustments. Several firms have provided high cost of living pay envelopes, supplementing the base wages by a percentage varying with the index number. These firms have not only safeguarded themselves against labor discontent in the present while prices are high but have made the way easier for future wage decreases if prices fall. The Bankers Trust Company in

[1] It should be emphasized that practically the same plan had been worked out independently by several besides myself. This was done in considerable detail by Aneurin Williams, M.P., Professor (now Dean) J. Allen Smith of the University of Washington, D. J. Tinnes of Hunter, N. D., and Henry Heaton of Atlantic, Iowa; and in a general way by Simon Newcomb, Alfred Russell Wallace, Professor Alfred Marshall, William C. Foster of Watertown, Mass., and others.

[2] See "Objections to a Compensated Dollar Answered," AMERICAN ECONOMIC REVIEW, vol. IV, no. 4 (Dec., 1914).

New York went to immense trouble and expense to calculate the changes in the cost of living to its clerks, appointing a special investigating committee which drew up a report of twenty-two pages.

But Dr. Knibbs, after discussing the feasibility of such special extraneous adjustments, goes on to say that, after all, such adjustments are not necessary.

Now, if such adjustments are not called for, why, it may be asked, have they been made in Australia, the United States, and other countries? To my mind there lies a world of significance in the fact that index numbers are being used to correct the aberrations of units of purchasing power. No possible explanation for so wide an adoption of this corrective, in spite of its clumsiness, has been or, I venture to believe, can be made except that the purchasing power of the dollar, the shilling, etc., acutely needs such correction!

But Dr. Knibbs maintains that gold is already sufficiently stabilized by the fact that there exists a large reservoir of it. In support of this supposed stability he gives no evidence whatever, but relies entirely on a priori assumption.

The simple fact is that gold, and our currency in general, is *not* stable! Actual statistical tests of the value of the dollar in terms of commodities in general, as shown by the index number, prove that even before the war gold was only about as stable as eggs and not as stable as carpets!

Thus we find Dr. Knibbs asserting that our currency does not need stabilization after admitting that an extraneous adjustment may be desirable and is practicable. Would it not be more logical if he had cited the Australian experience, which he used in support of an extraneous adjustment, to prove that we *do* need stabilization?

Moreover, an extraneous adjustment is *not* practicable as compared with the plan which Dr. Knibbs opposes. He says "*Exactly* the same result will be achieved [by index number adjustments in contracts] as will eventuate by Professor Fisher's scheme [for incorporating the index number in the monetary unit itself]." While, theoretically, it is possible by means of index numbers to adjust wage contracts, loan contracts, etc., yet from a practical point of view it presents extraordinary difficulties. *Theoretically* we might have an elastic yardstick, say the height of a barometer, changing from day to day. All that would be necessary for the

salesman selling cloth would be to have the weather bureau supply him daily with a simple multiplier, such as .823 on one day and .798 the next, by which, after measuring out his cloth on the barometer, he should make the needed adjustment! It is only a matter of arithmetic and to adapt Dr. Knibbs's words, "*exactly* the same result will be achieved"!

Practically, of course, one might almost as well expect an individual Englishman to adopt a decimal system and transact his business in dollars and cents while everyone else is talking in terms of pounds, shillings, and pence as to depend on an arithmetical factor for correcting either yards or dollars. Daylight saving was brought about by a shift of the clock applying to the whole country, although *theoretically* all that was necessary was for each individual to get up an hour earlier and make his day's program on that basis! Practically, Dr. Knibbs could not hope to see an extraneous method in general use for years and, until it is in general use, special inconveniences will be suffered by any firms which employ it.

A number of practical difficulties with such extraneous corrections are given in my *Purchasing Power of Money*.[3] They involve the annoyance of special contracts and special calculations. If one side of the ledger is stabilized and not the other, the profits are really destabilized.

It is clear that such a plan can be only a makeshift for extreme cases and can never be made universal. We must seek some more convenient method of applying the correction, one which will dispense with the need for each individual to make calculations. This is accomplished in the plan of stabilizing the dollar; for it incorporates, as it were, the index number in the monetary unit itself.

It is surprising to find Dr. Knibbs here also reversing the true argument. He complains of the plan to stabilize the dollar because of the trouble it would make to the "cambist"! Why did he not cite the fact, a million times as important, that the use of index numbers as an extraneous corrective to contracts would involve troublesome calculations, not to a negligible fraction of mankind but almost universally? The cambist is not only an infinitesimal fraction of one per cent of the population but a professional calculator; and as his work involves varying factors in any case, the introduction of a new variation would be of little trouble to

[3] Chapter XIII, § 4.

him even if his troubles were a matter of national concern. Moreover, the system would not even introduce such cambist calculations, if adopted internationally.

Dr. Knibbs again uses a double-edged argument when he finds fault with the proposed system for stabilizing the dollar because it would not meet the needs of varying classes which properly require different kinds of index numbers of different "weighting." Why does he complain of the stabilization plan on the ground that it does not work out its corrections to a sufficiently fine point, if his claim is true that instability of the gold standard is so trifling as not to need any correction at all!

Here again Dr. Knibbs gives no evidence as to his contention that different index numbers would seriously be needed for different classes. The truth is that actual facts contradict such an assertion as flatly as they contradict the assertion that no index number is needed at all and as flatly as the two assertions contradict each other. One of the striking points about index numbers is that usually they move in general sympathy, whatever the system of weighing, whatever the number of commodities, whatever the list of commodities, whatever the classes of the community to which they especially apply. And the divergences which we find under our present system of a variable dollar would be even less *if the dollar were stabilized.* For instance, retail prices now lag behind wholesale prices simply because wholesale prices are allowed to move so fast. Whenever the price level remains even approximately unchanged the large discrepancies between the movements of wholesale and retail prices disappear. If the level of wholesale prices were not allowed to move at all, the level of retail prices would also be stable.

Dr. Knibbs's second criticism deals with the question of securing greater justice. Dr. Knibbs takes exception to my use of the words "cheated" and "rob" as applied to the pranks played upon debtors and creditors by our present standard, or lack of standard, and gravely points out that when a contract is made it must be kept! I have often expressly stated that, under our present system, an individual harmed by the appreciation or depreciation of money has no grievance against some other individual. The problem is not one of *individual* justice but of *social* justice. The concept of *social* justice, as distinct from *individual* justice, is becoming year by year more distinct and important. For instance, the time has gone by when we coldly tell the workman who is in-

jured on a railway that he submitted himself to such a risk when he took employment and therefore has no grievance against anybody. Instead we provide some sort of social insurance. It is quite true that, under our present system, every user of money is a speculator in the value of gold and must take the consequences; and, as long as society has its present system, the individual is bound by its rules. It is not the behavior of the individual but the system itself which should be changed.

Dr. Knibbs says, "Why should we not apply the same principle to any commodity besides gold, say to wheat, cotton, iron, copper, frozen meat, etc., and indemnify the loser from a change in price?" The present system by which the meat dealer takes the risk of the price of meat, the wheat dealer that of the price of wheat, etc., puts the risk, which must be borne somewhere, where it can be borne best, in the hands of professionals.

If, however, meat were made the *standard of value,* all of us would become speculators in meat *without* the means which are open to the meat merchant of knowing what the changes of value from time to time are likely to be. The objection to our present system is not that a few specialists in gold have to suffer loss but that gold is made a yardstick for all contracts.

Dr. Knibbs's remaining criticisms can be dealt with more briefly. In one respect he has misunderstood the plan. He seems to think that it is equivalent to almost the complete demonetization of gold and that the value of gold (when discarded as money) would be reduced on that account. Incidentally I may point out that whether its value would be reduced or not the system of stabilization would operate to keep the value of a *dollar* stable. But as a matter of fact gold value would not be substantially affected. It must be remembered that today almost universally the monetary use of gold is only that of reserve, precisely what it would be under the proposed scheme.

In the same connection Dr. Knibbs seems to think that there is some hitch in regard to the connection between the paper certificates and the gold reserve. He says:

> The new scheme does not propose that governments issuing the paper should store either the composite unit or gold as a check on over-issue, and it is the leaving of this out of sight which lends plausibility to the scheme. . . . *The necessity of storing a reasonable proportion of the thing of value, that is gold, represented by the paper, is a safeguard which the new scheme does not sufficiently take into account.*

Dr. Knibbs is mistaken. It most certainly *is* proposed to retain "gold stock" and to make the paper money convertible. The processes by which gold adds to or subtracts from the currency will be substantially the same as at present. The only essential change is that the price of gold given by the government to the miner and importer and asked of the jeweller and exporter will no longer be the arbitrarily fixed $20.67 an ounce but will vary according to what gold is really worth as shown by means of the index number from time to time. Redemption would, of course, occur just as at present and provision would be made for the reserve to keep the due ratio to the certificates outstanding. In my forthcoming book on *Stabilizing the Dollar* this point is elaborated in a special appendix on The Gold Reserve.

Dr. Knibbs conjures up hypothetical cases such as universal world famine, world drought, world shortages, under which circumstances he prophesies that the plan would do more harm than good.

Here again Dr. Knibbs reverses the true argument. Why should he cite the almost infinitely improbable case of a world scarcity or superabundance of things in general and pay no heed to the extremely probable, in fact often realized, case of scarcity or superabundance of gold in particular? Instead of supposing improbable simultaneous shortage throughout the world of a hundred commodities why not suppose that the alluvial gold at the mouth of the Sacramento River should prove to be recoverable at a profit and should prove to amount to many billions of gold, both of which propositions have been reported to be true?

The only time when we have had something approaching a world scarcity has been during this recent war and yet it has been just at this time that we have, in wage payments, adopted the corrective for monetary units which Dr. Knibbs himself mentions with approval. If these high war prices represented not superabundance of money but simply scarcity of goods it might well be argued that no such correction was called for.

I make bold to say that if so able a critic as Dr. Knibbs can not find more serious defects in the plan than he shows in his article we may rest assured that the plan will survive the attacks upon it. Dr. Knibbs himself admits the main point when he says: "It is true, of course, that the scheme will tend to stabilize the value of the dollar certificate in ordinary circumstances." He simply denies the need.

It is no reflection on Dr. Knibbs to say that, while he may be quite unconscious of the fact, in my opinion his objections, like those of the great mass of objectors, are emotional, not intellectual. He would defend the existing system against an unwelcome attack. He fears to see it changed. "We are safer with a system of a noble metal basis," he says. In the bottom of his mind, I venture to infer, there is just one objection to the new system and that is that it is new.

Now that we have and are actually using the index number as a corrective of our monetary units, they stand convicted and will become increasingly discredited until in some way the needed correction is applied more generally. Possibly some better way out than that which I have suggested may be found. The substitute mentioned by Dr. Knibbs of an extraneous correction can and will be applied sporadically and so will serve a good purpose as a stepping stone to something more general. That some day such a means of releasing us from the present instability of monetary standards will be desired and attained seems to me manifest destiny.

IRVING FISHER.

Yale University.